



UNCLASSIFIED

Memorandum for File

-2-

RS-5410/129

Organization 5410 desires to do some gamma rate and neutron measurements and will stay in touch with 1420 and 5320 on the gamma-measurement locations.

Organization 7430 has been working with 5320 on hardened instrumentation. The goal of the work which is actually underway including outside contracts, is to devise telemetering and recording equipment to operate at a neutron level of  $5 \times 10^{13}$  n/cm<sup>2</sup> which will recover from the gamma-induced transient within 4-5 milliseconds. An in-house activity to obtain breadboard models of circuitry to withstand  $10^{15}$  is just now getting underway. Organization 7430 will test breadboard circuitry on Baker and/or Howland tests in 1964. A special effort not now in process would be required to have useable circuitry to operate at  $5 \times 10^{14}$  by Fall 1964.

Organization 7430 has been asked by SCLL to help with some circuit radiation sensitivity measurements at the reactor but is not otherwise involved in the hardened RV instrumentation endeavors.

*Charles D. Broyles*  
for  
B. F. MURPHEY - 5410

*Changed*

*per DBS, JWE, TBC  
discussion of 7/12/63  
TBC 7/22*

BFM:is

DISTRIBUTION:

- 1/10A - J. R. Ames, 1424
- 2/10A - S. A. Moore, 1540
- 3/10A - A. W. Snyder, 5320
- 4/10A - T. B. Cook, 5400 ←
- 5/10A - C. R. Mehl, 5411
- 6/10A - C. D. Broyles, 5413
- 7/10A - J. C. Eckhart, 7250
- 8/10A - J. H. Scott, 7430
- 9/10A - V. K. Smith, 7433
- 10/10A - B. F. Murphey, 5410

UNCLASSIFIED